

# CCK Climatic Chamber

- Robust construction
- Volumes between 81 and 2000 liters
- Temperature range from -70°C to+180°C
- Thermal gradients up to 5°C/min.
- Easy to install, easy to use and reliable
- Compliance with standards: UNE, DIN, MIL, ISO,....



Climatic tests on specimens can reproduce the climatic conditions of temperature and humidity, which will be subjected during its lifetime. This will provide for their behavior in environmental conditions of use, transport and storage, preventing defective product hits the market.

**DYCOMETAL EQUIPOS CONTROL DE CALIDAD, S.L.**, the Trademark that has given to their products the commitment that each one of them, depending on its own characteristics, can reproduce faithfully all the environmental conditions that Nature is able to offer to obtain a better Quality of the materials.

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## **FEATURES**

### **Construction**

- Extremely robust
- Built on a steel tube structure and externally based galvanized steel sheet with oven-dried acrylic paint to RAL-9010.
- Interior Sheet Stainless Steel AISI 304 (18/8), completely sealed and seamless interior. Door painted according to RAL-9010.
- Doors with or without sight glass.
- Thermal insulation panels composed of semi-rigid polyurethane foam of high density and very low thermal conductivity, free of chlorofluorocarbons, asbestos and lead oxide and mercury as stipulated by the Environmental Regulations concerning the installation of thermal-acoustic insulation.
- Standard models with capacities from 81 (MINITEST) to 2000 liters.
- 4 multidirectional castors in the base of the chamber to facilitate the movement, and/or vibration height adjustable support (optional depending on model).
- Access port made in PVC with seal cap (different diameters).
- Temperature control by electronic controller with digital read-actual value and setpoint work.
- Temperature measuring by PT-100 Ohm. DIN Class probes
- 2 stainless steel shelves



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## **CONTROL:**

- Programs numbers stored in the memory: 50.
- 500 segments programs.
- Loops number: from 1 to 999 or infinite
- Optimization of work values by PID parameters in cold and heat.
- Direct humidity in%
- Pt-100 probe
- LED screen with alphanumerical keyboard that allows visualize the programmed values. The screen has an ergonomic position, switch and controls.



- Temperature and humidity monitoring which allows programming in sections based profiles using ramp and stabilization.
- The system allows you to save in nonvolatile memory all programmed data, not being affected by power failures.



- Setting alarms. Advise when exceeds a safety limit or for some reason there is any deviation from the programmed conditions.
- Directly reading of the moisture in %HR
- •Power Supply Voltage (check depending on the modelphase or three-phase)
- Climatic test Software + PC Cable

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## **S**OFTWARE:

Software for monitoring, data logger programming, graphics, alarms and configuration of the instruments.

- Record and storage to file.
- Display of existing file.
- Creation and modification of the programs.
- Obtaining of Temperature and Humidity records in digital files with programming of the record interval.



- Record and storage in a file of Essay historical for real values as well as configured alarms.
- Essay Graphical Representation, X-Y type, that shows in the screen the setpoint and the real values, as well as the configured alarms.
- Essay records available to be converted to ASCII format

## TECHNICAL SPECIFICATIONS:

MODELS		CCK-	40	/81	40/	125	40/	180	40/	300	40/	480	40/	648	40/1	1000	<b>40</b> /1	500	40/2	000
		CCK-	70/81		0/125		70/180		70/300		70/480		70/648		70/1000		70/1500		70/2000	
Volume		Liters	81		125		180		300		480		648		1000		1500		2000	
	Heigth	mm	450		500		600		700		800		900		1000		1000		1000	
Workspace	Width	mm	450		500		600		700		800		900		1000		1000		1000	
	Depth	mm	450		500		500		625		750		800		1000		1500		2000	
	Heigth	mm	1235		1500		1800		1950		2020		2100		2100		2200		2200	
External dimensions	Width	mm	980		1000		900		1000		1100		1330		1290		1290		1330	
	Depth	mm	1050		970		1100		1220		1300		1450		1505		2225		2650	
Thermal test																				
Minimum temperature		°C	-40	-70	-40	-70	-40	-70	-40	-70	-40	-70	-40	-70	-40	-70	-40	-70	-40	-70
Maximum temperature	ature										+1	80								
Cooling temperature change rate (1)		°C/min	2	2	2	2	3	2	3,5	2,5	3	2,5	3	2,5	3	2,5	2,5	2	2,5	2
Heating temperature change rate (1)		°C/min	3,5	3	3,5	3	3,5	4	4	4	4	4	4	4	4	4	3,5	3,5	3,5	3,5
Temperature stability		°C							±0,1 °C to ±0,3°C											
Temperature uniformity		°C ±0,5 °C to ±1,5°C																		
Maximum compensation (2)		KW	1,2	0,7	1,2	0,7	2	1,5	2	1,5	2	2	2	2	2,5	2	3,5	3	3,5	3
Climatic test																				
Temperature range		°C							+10°C to +90°C											
Humidity range		%RH	%RH 10% to 98%																	
Dewpoint - Type 1		°C								6,5°C to 86°C										
Dewpointo - Type 2		°C hasta -5°C (limited in time)																		
Humidity stability		%RH			±1%RH to ±3%RH															
Maximum compensation (3)		KW	0,1	0,25	0,1	0,25	0,4	0,4	0,4	0,4	0,4	0,4	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5
Power																				
Power (kW aprox)		kW	4,3	6	5,2	7,5	6,1	7,8	7,8	9	9,5	10,1	10,7	11,8	12	13,4	16	18	20	22,9
Weight		Kg	220	250	250	275	400	425	550	575	700	750	850	920	1000	1080	1120	1200	1280	1340
Voltage		٧	V 400V 3N~PE																	
Condenser		Air cooled																		
Noise level (dB aprox.)		dB						<60												

Notes:

- (1) Temperature change rate according  $\,$  IEC EN 60068-3-5
- (3) In climatic tests with range  $\pm 25^{\circ}\text{C}$  to  $\pm 80^{\circ}\text{C}$  and  $\leq 90\%\text{HR}$

(2) In termal tests, at  $25^{\circ}\text{C}$ 

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